

Seinosuke TANDA & Toyohiko KAWATANI*: **A new
species of *Cordyceps* parasitic on the ergot
of *Sasa oseana* Makino**

丹田誠之助・川谷豊彦*: オゼザサ麦角に発生した
Cordyceps の1新種

(Plate I)

One of the authors, Tanda (1968) reported epiphytic or parasitic fungi on the ergot and honey dew of *Claviceps*. Recently, another fungus has been found, which is parasitic on the ergot of *Sasa oseana* Makino (*Claviceps purpurea* Tul. var. *sasae* Tanda). After detailed morphological studies, we identified it to be a new species of *Cordyceps*.

Cordyceps ergoticola Tanda et Kawatani, sp. nov.

Stromatibus solitariis vel gregariis, simplicibus vel rarius ramosis; capitulo elliptico vel anguste elliptico, maturis colore externi brunneo vel atro-brunneo, 0.9-3.7 mm alto, 1-2.5 mm lato; stipite cylindrico, recto, 0.4-0.9 mm lato; peritheciiis superficialibus, prominentibus, anguste ovoideis, 308-562 μ m longis, 108-208 μ m crassis; ascis cylindraceis, linearibus, hyalinis, 108-231 μ m longis, 1.3-3.2 μ m crassis; ascosporis hyalinis, filiformibus, primo continuis, dein multiseptatis.

Hab.: parasitic on the sclerotia of *Claviceps purpurea* Tul. var. *sasae* Tanda which has infected the ovaries of "Ozezasa", *Sasa oseana* Makino; Ozegahara, Prov. Kozuke, Japan, Aug. 18, 1958, TUAMHCO801 (Holotype).

Nom. Jap.: Ozezasa-bakkaku-yadoritake (nov.).

Stromata solitary or gregarious (Fig. 1); capitulum elliptical or narrowly elliptical, external colour brown or dark brown at maturity, with aculeate surface under microscope due to the formation of prominent perithecia (Fig. 2), 0.9-3.7 mm in height and 1-2.5 mm in width (Aver. 2.1×1.7 mm); stipe 0.4-0.9 mm (Aver. 0.5 mm) in diam., its length less than the height of capitulum; perithecia superficial, 308-562 μ m in length, 108-208 μ m in diam. (Aver.

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450×162 μ m), narrowly ovoid, tapering towards the ostioles, exposing almost the whole parts over the stromatic structure (Figs. 3 and 4); asci 108-231 μ m in length, 1.3-3.2 μ m in diam. (Aver. 150×2.3 μ m), slender, cylindraceous, hyaline, with a globose cap at the apex; ascospores hyaline, filiform, continuous at first, multiseptate at maturity.

By the characteristics of the size of capitula and perithecia, this fungus may easily be distinguished from the other two species of *Cordyceps* parasitic on ergot.

Örtengren (1916) found a *Cordyceps* parasitic on the ergot (*Claviceps purpurea* Tul.) of *Secale cereale* L. in Sweden for the first time, and named it *C. clavicipitidis* Örtengren. Later, Imai (1935-36) reported a *Cordyceps* infecting the ergot of *Sasa paniculata* Mak. et Shib., naming it *C. clavicipitiicola* Tokunaga et Imai. The stromata of the present new species are remarkably shorter in length than these two species. On the contrary, the perithecia as well as asci exceed by far the foregoing two species in length. The morphological characters of the perithecial state of *Cordyceps* are apparently different from *Claviceps purpurea* var. *sasae*.

Literature

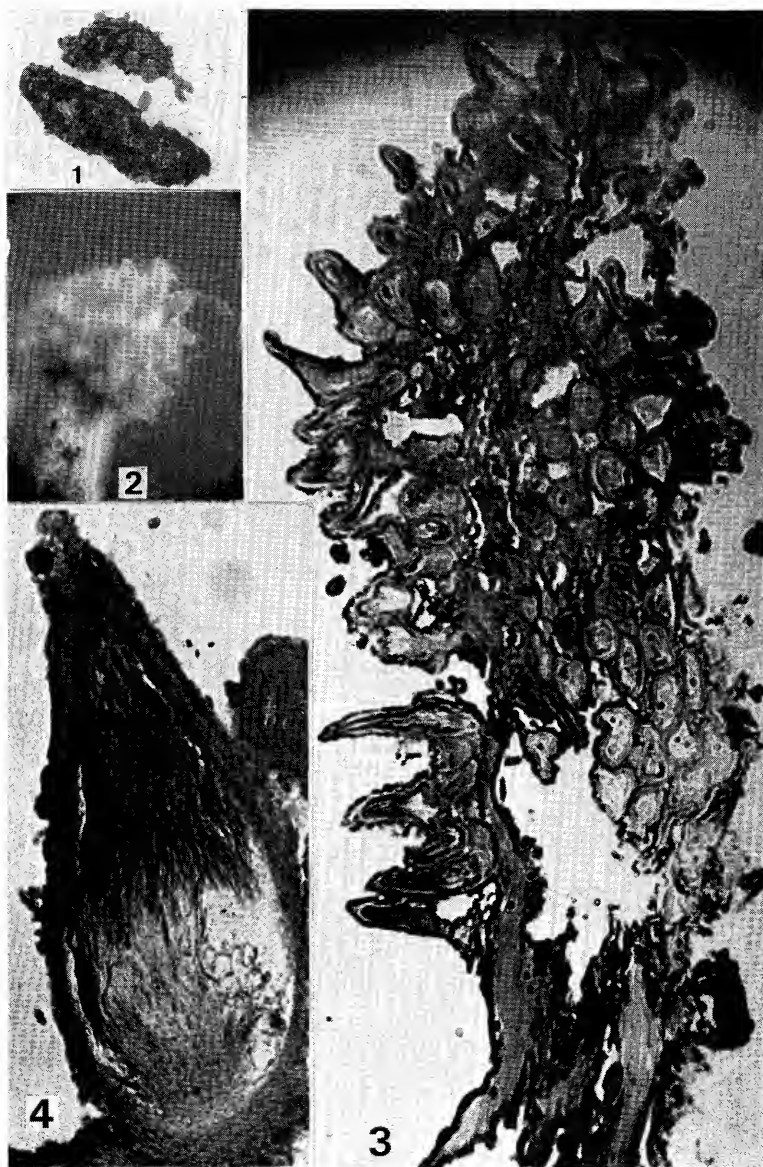
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Explanation of Plate I

Fig. 1. Ergots of *Sasa oseana* Makino protruding stromata of *Cordyceps ergoticola* (×1.2). Fig. 2. Enlarged view of a stromatal head (×10). Fig. 3. Longitudinal section of a stroma (×45). Fig. 4. Perithecium (×200).

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イネ科植物を侵す *Claviceps* の菌核には、これまでに 2 種の *Cordyceps* の発生が記録されているが、著者らは子座と子のう殻の特徴で従来の 2 種とは明らかに異なる *Cordyceps* を *Sasa oseana* Makino の麦角上で見出し、これを新種と認め、*C. ergoticola* Tanda et Kawatani と命名記載した。



S. TANDA & T. KAWATANI: New *Cordyceps*.